

A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab supports the Department's business lines of environmental quality, energy resources, national security and science.

■ ENERGY RESOURCES – Expert Explains Advanced Fuel Cycles

A senior INEEL research director recently updated attendees of the 2003 National Academy of Engineering National Meeting Symposium on alternatives to direct spent nuclear fuel disposal through development of advanced nuclear fuel cycles. The Advanced Fuel Cycle Initiative (AFCI) seeks to recover the energy value and reduce the cost of geologic disposal, reduce civilian plutonium, reduce the radiotoxicity of high-level waste bound for disposal, and make optimal use of the limited repository space available in the future.

■ ENVIRONMENTAL QUALITY – Work Continues on Environmentally Friendly Bus

The INEEL is working with automotive industry leaders and private industry to develop a low-floor, 18- to 32-passenger vehicle that uses alternative fuel and complies with the Americans with Disabilities Act (ADA). In the first phase of the project, scheduled for completion this spring, program partners will develop a low-floor shuttle bus prototype with a natural gas power train. Eventually, the vehicle is expected to be manufactured using several drive trains to allow flexibility in fuel for the vehicle. Partners in the project with the INEEL include ASG Renaissance, Ruby Mountain/Greater Yellowstone Clean Cities Coalition, Arboc Ltd. and the National Park Service. The goals of the collaborative effort include protection of the environment and increased national security through reduced dependence on foreign sources of energy.

■ NATIONAL SECURITY – INEEL Technologies Showcased in Treasure Valley

The INEEL joined academic and business-sector partners in the Treasure Valley to participate in the 2003 observance of National Engineers Week Feb. 19-21. INEEL National Security division representatives set up an exhibit at Boise's Discovery Center of Idaho displaying the range of work performed by the division. Specific technologies highlighted included the Portable Isotopic Neutron Spectroscopy System, a thermal imaging camera and the newly developed Hazmat Camera. Over the course of three days, nearly 1,300 public high school and home school students, educators, regional business people, law enforcement groups and political leaders stopped by to get a first-hand, interactive look at the national security contributions of the INEEL.

■ SCIENCE – Annual Scholastic Tournament Kicks Off

The 13th annual INEEL Scholastic Tournament began its 2003 run with a regional tournament in Idaho Falls the last week of February. Over 800 Idaho students from nearly 80 high schools are registered to compete in this year's science bowl contests. The competition is set up similar to sporting events with round-robin and consolation format tournaments. Teams consist of as many as 10 members, with seven competing at a given time and three substitutes. The fast-paced question-and-answer event awards points to teams quickest to "buzz in" and answer the most questions correctly. Twenty-eight teams will emerge from the regionals and advance on to the state championship tournament March 20-21 in Boise. The INEEL Scholastic Tournament receives corporate support from Micron, Westmark Federal Credit Union, Idaho Power, Monsanto, Key Bank and Argonne National Laboratory-West.

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